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**REMARKS**

It is believed that the following remarks attend to all rejections and objections presented in the pending July 18, 2003 office action. The related applications section is amended as requested by the Examiner.

**Claim rejections - 35 U.S.C §102(b)**

Claims 15, 19 and 20 stand rejected under 35 USC § 102(b) as being anticipated by U.S. Patent No. 4,822,042 ("Landsman"). Applicants respectfully disagree. To anticipate a claim, the reference must teach every element of the claim and "the identical invention must be shown in as complete detail as contained in the ... claim." *MPEP 2131* citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 2 USPQ2d 1051 (Fed. Cir. 1987) and *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913 (Fed. Cir. 1989).

Landsman does not teach every element of amended claim 15. Amended claim 15 requires the following step elements:

- (1) integrating a sensing unit with the sport implement so that the sensing unit is non-interfering with normal operation of the sport implement, the sensing unit having at least one sensor within a housing of the sensing unit;
- (2) processing data from the sensor and within the sensing unit when operated by the user; and
- (3) wirelessly transmitting the processed data to a remote receiver, the processed data being indicative of the athletic performance of the user.

Applicants have amended claim 15 to incorporate "housing" as a limitation that clearly distinguishes claim 15 from Landsman, based on the Examiner's arguments on pages 11-12 of the present action. Landsman teaches a tennis racket 2 with a plurality of sensors 12a-d used to detect shock waves around a periphery 10 of frame 4; these sensors are clearly not within a housing. Applicants' sensing unit has a sensor within a housing of the sensing unit, such as shown as unit 10, FIG. 1. Applicants' specification discusses how the housing may be a separate distinct housing (e.g., plastic housing per page 38, line 5), or formed by the actual material of the sport implement. See Applicants' specification, page 6, lines 17-27.

For similar reasons, Landsman also does not teach the elements of claims 19, 20. Reconsideration and allowance is thus requested.

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**Claim Rejections - 35 USC §103**

Claim 16 stands rejected under 35 USC § 103 as being unpatentable over Landsman in view of U.S. Patent No. 4,699,379 ("Chateau"). Respectfully, Applicants disagree and traverse the rejections. Applicants believe, for example, that Landsman and Chateau do not render any of the claims *prima facie* obvious, as explained below.

The following is a quotation of from the MPEP setting forth the three basic criteria that must be met to establish a *prima facie* case of obviousness:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP §2142, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicants' claim 16 depends from claim 15, argued and amended above. Landsman does not teach the elements of claim 15. Chateau is cited presumably because it teaches an athletic monitoring device generally in the form of a watch. Nowhere does Chateau and Landsman (alone or in combination) teach a "sensing unit reporting the athletic performance to a watch worn by an individual". Moreover, neither does Landsman and Chateau teach the elements of claim 1, including a sensing unit with a sensor within a housing. Reconsideration of claim 16 is thus requested.

Claims 17 and 21 stand rejected under 35 USC § 103 as being unpatentable over Landsman in view of U.S. Patent No. 5,056,783 ("Matrovich"). Again, Applicants respectfully disagree and traverse the rejections, as Applicants again believe that Landsman and Matrovich do not render any of the claims *prima facie* obvious.

Matrovich teaches an acceleration means. However, as above, Landsman and Matrovich, alone or in combination, do not teach the elements of claim 17, including a sensing unit integrated with a sport implement and having a housing within which resides a sensor in the form of an accelerometer. Matrovich and Landsman also fail to teach performance data in the form of "power, airtime, speed and drop distance", as in claim 21. Reconsideration and allowance of claims 17, 21 are requested.

Claim 18 stands rejected under 35 USC § 103 as being unpatentable over Landsman in view of Matrovich and U.S. Patent No. 5,761,096 ("Zakutin"). Once again Applicants disagree. Zakutin teaches a speed sensing projectile. However, Zakutin does not teach the elements of claim 18. Specifically, Landsman, Matrovich and Zakutin do not teach, alone or in combination, the elements of claim 18 since, for example, the elements of claim 15 are not also not taught or suggested by these references pursuant to 35 U.S.C. §103. Reconsideration of claim 18 is requested.

Claim 22 stands rejected under 35 USC § 103 as being unpatentable over Landsman in view of U.S. Patent No. 4,759,219 ("Cobb"). Once again, Applicants disagree. Cobb teaches a swing parameter measuring system. The elements of claim 22 (and more specifically claim 15) are not taught by Cobb, or by Landsman with Cobb; the combination of Cobb with Landsman thus fails under 35 U.S.C. §103. Reconsideration of claim 22 is requested.

Claims 1 and 2 stand rejected under 35 USC § 103 as being unpatentable over U.S. Patent No. 6,020,851 ("Busack") in view of U.S. Patent No. 4,089,057 ("Eriksson"). Applicants disagree. Applicants' claim 1 requires the following step elements:

- 1) coupling a mobile sensor with each of the persons;
- 2) downloading data generated by the mobile sensor to an Internet-accessible database; and
- 3) processing the data to compare athletic performances of the multiple persons, wherein Internet users may review comparisons by accessing the database through the Internet.

Eriksson teaches a shock sensitive radio transmitter that attaches to a ski, a stationary radio receiver, a plurality of optical sensors, and an electronic unit for determining jump length. There is no teaching or disclosure of downloading data from a mobile sensor to an Internet-accessible database or processing data to compare athletic performances such that Internet users may access the database remotely. Eriksson also does not teach coupling multiple sensors to multiple persons but only teaches a single, serial ski jumper with a single unit. Claim 1 explicitly requires coupling of a mobile sensor to several persons and Eriksson does not teach or suggest anything like this.

Busack teaches an auto race monitoring system that determines position and attitude of race cars. Busack purports to have a figure 2 to show features of a data acquisition chip 30 within each car, but Busack does not have a figure 2 and therefore cannot support such an embodiment. In any event, Busack does not teach attaching a mobile sensor to a plurality of persons and downloading data from the multiple sensors to determine athletic performance. The data Busack describes are vehicle parameters such as engine temperature, speed and oil pressure (see col. 3, lines 1-6) – these are not athletic performances of a person, as required in Applicants' claim 1. Busack's data acquisition chip is not itself a sensor, and acts to "acquire information" (e.g., speed) of the vehicle. See col. 3, lines 1-7.

Referring to *prima facie* obviousness, first there must be some suggestion or motivation, either in Busack and/or Erickson, or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings. There is no motivation to combine Busack with Eriksson, neither in the references or in the prior art. The Examiner contends – on page 12 of the present action – that both the references provide motivation and that the 103 rejection provides motivation. We respectfully disagree. The rejection merely states it would be obvious to apply techniques of Eriksson to the invention of Busack to render claim 1. However, that would require much modification to achieve – absent hindsight. Moreover, neither Eriksson nor Busack suggest the need or desire to have technology described within the other. Therefore, there is no motivation to combine, either in the references or in the prior art (the Examiner's statement alone is not sufficient; Applicants specifically refer to MPEP 2143.01, which states that "ordinary skill in the art" cannot be used to teach modifications of Busack and Eriksson). Accordingly, Applicants request specific evidence in the prior art (pursuant to MPEP 2144) that would suggest the combination and modification of Busack and Eriksson. We contend that this evidence is not available.

The Examiner further argues that Eriksson teaches comparing athletic performance among multiple persons, in view of Eriksson abstract and col. 1, lines 13-16. However, the abstract is absolutely silent as to any reference to more than one person. Moreover, in col. 1, Eriksson only discusses the measurement of a single skier (a "competitor's speed" – which is singular), and not multiple competitors as suggested by the Examiner. Certainly, there is no teaching of concurrent measurement of more than a single person (a new claim 27 is now included to specifically claim concurrent wireless communications). Nonetheless, Eriksson

and Busack are still inadequate to render claim 1 since they do not, alone or in combination, the elements of claim 1.

The Examiner further states that "the test is what the combined teachings of the references would have suggested to those of ordinary skill". The problem is, applying Eriksson with Busack in this way requires hindsight. Moreover, according to 35 U.S.C. §103, each element of claim 1 must be taught – and this has not occurred. Furthermore, the Examiner refutes our earlier statement that the structure and function of Busack and Eriksson is relevant – however, this statement derives directly from MPEP 2141.

Note, for example, that Busack is non-analogous art with respect to Eriksson. One skilled in the art of auto race monitoring would not look to a ski jump system of Eriksson. There is also no express motivation within the references to combine Busack with Eriksson. 35 U.S.C. §103 requires that there is a reasonable expectation of success – if the references are combined – to render claim 1; however, this too is not reasonable. Eriksson's optical ski jumping method and device (remote optical sensing and lasers) would not reasonably utilize the data acquisition chip of Busack to measure "speed" as athletic performance. Eriksson also teaches only a single skier, and does not teach comparing athletic performances among a plurality of persons (and neither does Busack). The use of vehicle parameter data from Busack does not modify Eriksson so as to measure skier speed without Eriksson's plurality of optical sensors. Neither Busack nor Eriksson teach attaching the sensor to multiple persons that also generates the data used to compare athletic performance.

Note further that 35 U.S.C. §103 also requires that the prior art reference (or references when combined) must teach or suggest all the claim limitations; however Busack and Eriksson do not teach every element, as described above (these references are discussed individually in paragraphs above only to illustrate their failure to teach elements of claim 1; combining Busack with Eriksson produces exactly the same result – the combination of Busack with Eriksson also does not teach all the elements of claim 1). Applicants specifically refer to MPEP 2143.01, which states that "ordinary skill in the art" cannot be used to teach modifications of Busack and Eriksson.

Accordingly, absent hindsight, one skilled in the art would not be inclined to combine Busack with Eriksson (again, even the combination does not reasonably render claim 1). According to MPEP 2141.01(a), we repeat that the structure and function of Busack and

Eriksson is relevant to whether one of ordinary skill would combine the references. Once again, Eriksson teaches a shock sensitive radio transmitter that attaches to a ski, a stationary radio receiver, a plurality of optical sensors, and an electronic unit for determining jump length; Busack teaches an auto race monitoring system that determines position and attitude of race cars, and a data acquisition chip that acquires speed. The structure and function of Busack and Eriksson are therefore quite different and should not be considered analogously by one of ordinary skill. Nonetheless, even if combined, there is absolutely no reasonable chance of success in rendering claim 1 by the supposed combination; the "skill of one in the art" at the time of the invention is inapplicable to make the modifications of Busack and Eriksson necessary to render claim 1.

Claims 2 depends from claim 1 and benefit from like arguments. Applicants again request reconsideration of claims 1 and 2.

Claims 3 and 10-13 stand rejected under 35 USC § 103 as being unpatentable over Busack in view of Eriksson as applied to claim 1, and further in view of U.S. Patent No. 4,757,714 ("Purdy"). Respectfully, Applicants disagree and traverse the rejections. Applicants believe, for example, that Busack, Eriksson and Purdy do not render any of claims 3, 10-13 *prima facie* obvious, as explained below.

We have already argued the inapplicability of Busack and Eriksson as to claim 1 and under 35 USC § 103. Specifically, Busack and Eriksson – even if combined – do not reasonably teach the elements of claim 1. Purdy teaches a Doppler speed sensor attached to a person. But Purdy also does not teach the steps of claim 1, as narrowed by claim 3, 10-13. For example, consider Applicants' claims 12 and 13: claim 12 requires that the sensor be attached to a body of each of the persons, while claim 13 requires that the sensor be attached to clothing of each of the persons. Clearly, Busack and Eriksson have absolutely no teaching as to such features. Busack and Eriksson also do not teach elements of claim 1, as argued above. The addition of Purdy also does not teach the elements of claim 1; for example it does not teach comparing data amount multiple sportsmen. Claims 3, 10-13 depend from claim 1 and benefit from like arguments.

We also must ask for evidence (MPEP 2144) available in the prior art that proves the Examiner's rejections under claims 3, 10-13 that one "skilled in the art" would find it obvious to render Applicants' claims 1, 10-13 in view of Eriksson, Busack and Purdy, such as by

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showing how it would be obvious to modify the references to render these claims. We contend that this is not possible in view of the fact that the references do not teach the elements of claims 3, 10-13. Note that there is no reasonable chance of success to modify Purdy, Busack and Eriksson to render any of claims 3, 10-13. Purdy's Doppler sensor would not reasonably integrate with either Eriksson's optical sensors or Busack's data acquisition chip to compare athletic performances among a plurality of persons. The skill of one of ordinary skill in the art at the time of the invention is not applicable to modify Busack, Eriksson, Purdy to render claim 1 (see MPEP 2143.01); and such a modification is clearly required. Reconsideration of claims 3, 10-13 is thus requested.

Claims 6 and 7 stand rejected under 35 USC § 103 as being unpatentable over Busack in view of Eriksson as applied to claim 1, and further in view of U.S. Patent No. 6,436,052 ("Nikolic"). Claims 6-7 have to do with attachment of power sensors. Nikolic teaches local storage of heart rate and acceleration. The combination of Nikolic with Busack and Eriksson still does not render all elements of claim 1, from which claims 6-7 depend. We also must ask for evidence (MPEP 2144) available in the prior art that proves the Examiner's rejections under claims 6-7 that one "skilled in the art" would find it obvious to render Applicants' claims 6-7 in view of Eriksson, Busack and Nikolic, such as by showing how it would be obvious to modify the references to render these claims. We contend that this is not possible in view of the fact that the references do not teach the elements of claims 6-7. Reconsideration is thus requested for claims 6-7.

Claims 23-25 stand rejected under 35 USC § 103 as being unpatentable over Busack in view of Eriksson as applied to claim 1, and further in view of U.S. Patent No. 6,002,982 ("Fry").

Applicants' claim 23 requires the following step element: attaching a mobile altimeter to each of the persons, the step of processing the data comprising comparing altitude variation between each of the persons.

Fry teaches a GPS receiver; nowhere does Fry teach an altimeter. Claim differentiation to claim 24 (with GPS) should distinguish claim 23 to include devices other than GPS. Since Fry does not teach or suggest this (and neither does Busack and Eriksson), claim 23 is allowable. We further request evidence pursuant to MPEP 2144 as to how it would be "obvious" to a skilled artisan to modify Fry, Eriksson and Busack (and prove



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motivation to combine these references) to render claim 23. We contend that this cannot be done. Reconsideration is thus requested.

As to claim 24, attachment of a GPS receiver is taught. Nonetheless, once again Fry, Eriksson and Busack do not teach, alone or in combination, the elements of claim 1, from which claim 24 depends. Reconsideration is thus also requested for claim 24. .

Applicants' claim 25 requires "attaching a mobile pressure sensor to each of the persons". Fry has no teaching of this step element, and neither does Busack and/or Eriksson. Reconsideration is thus requested for claim 25.

We appreciate the indication of allowable subject matter in claims 4, 5, 8, 9, 14, as cited in paragraph (15) of the office action.

It is believed no additional fees are due. If any additional fee is due, please charge Deposit Account No. 12-0600.

Respectfully submitted,

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Date: \_\_\_\_\_

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